

Bantam Rocket Affordable SLV Stage (BRASS), Phase I

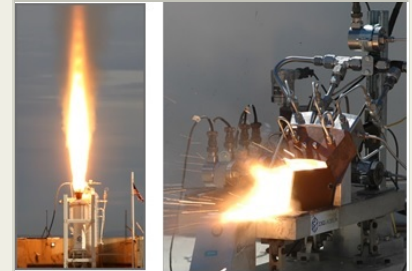
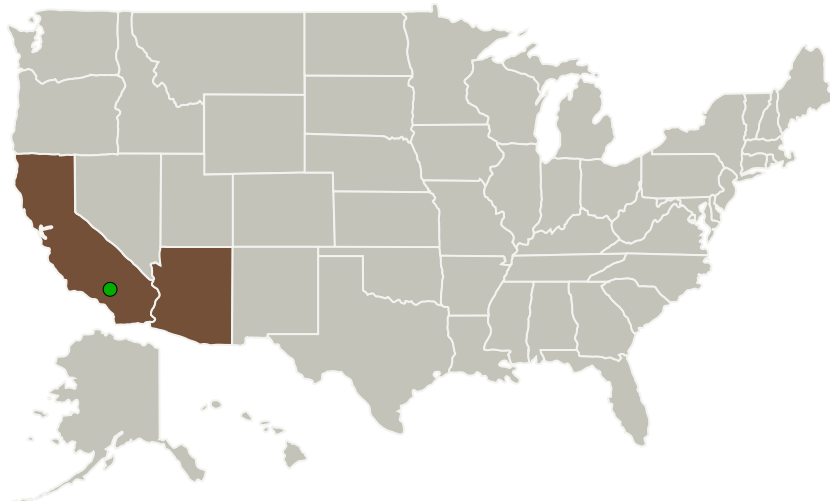
Completed Technology Project (2017 - 2018)



Project Introduction

During the proposed Phase I research and development effort, the project team will integrate previously demonstrated technologies into a stage 4 propulsion system for an existing Small Launch Vehicle (SLV). The resulting fourth stage will meet launch vehicle requirements for Mass Fraction and Specific Impulse. Key stage component will be fabricated and demonstrated. The propulsion system will be evaluated in a hot-fire test series. The proposed project team will develop a plan for a potential follow-on Phase II flight demonstration program.

Primary U.S. Work Locations and Key Partners



"Bantam Rocket Affordable SLV Stage (BRASS)", Phase I Briefing Chart Image

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Organizations Performing Work	Role	Type	Location
Exquadrum, Inc.	Lead Organization	Industry Small Disadvantaged Business (SDB)	Adelanto, California
● Armstrong Flight Research Center (AFRC)	Supporting Organization	NASA Center	Edwards, California
University of Arizona	Supporting Organization	Academia Alaska Native and Native Hawaiian Serving Institutions (ANNH), Hispanic Serving Institutions (HSI)	Tucson, Arizona

Primary U.S. Work Locations

Arizona	California
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Images



Briefing Chart Image

"Bantam Rocket Affordable SLV Stage (BRASS)", Phase I Briefing Chart Image
(<https://techport.nasa.gov/image/134458>)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Organization:

Exquadrum, Inc.

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

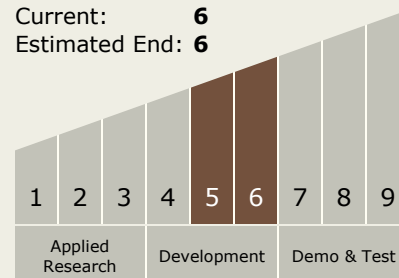
Carlos Torrez

Principal Investigator:

Marlow Moser

Technology Maturity (TRL)

Start: 5
Current: 6
Estimated End: 6



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Technology Areas

Primary:

- TX01 Propulsion Systems
 - └ TX01.1 Chemical Space Propulsion
 - └ TX01.1.5 Hybrids

Target Destinations

The Sun, Earth, The Moon, Mars, Others Inside the Solar System, Outside the Solar System